

Europäisches Patentamt
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(11) EP 1 036 937 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
23.01.2002 Bulletin 2002/04

(51) Int Cl.7: F03D 11/00, F03D 1/06,
H02G 13/00, H01C 7/12

(43) Date of publication A2:
20.09.2000 Bulletin 2000/38

(21) Application number: 00105759.5

(22) Date of filing: 17.03.2000

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: 17.03.1999 JP 7200499

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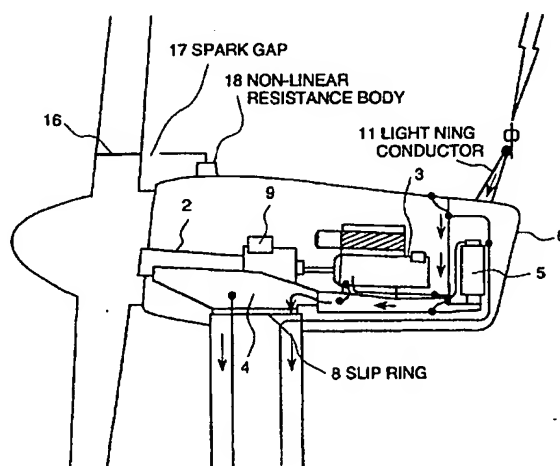
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(54) Lightning protection system for wind power generation installation

(57) In a lightning protection system for a wind power generation installation, a conductor ring 16 is provided on a wind mill vane 1 and at a rotor casing 6 incorporating a wind power generator 3 a zinc oxide element

18 is provided so as to face the conductor ring 16 with a spark gap 17, thereby, if a lightning in winter season which causes to flow a large current for a long duration time hits the wind mill vane 1, the wind power generation installation is effectively protected.

FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 00 10 5759

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	US 5 547 907 A (KATSUMATA MASAOKI ET AL) 20 August 1996 (1996-08-20) * abstract *	3	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F03D H02G H01C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 October 2001	Examiner Raspo, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1500 (01.02.1994) (P4/C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet 8

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-3



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**LACK OF UNITY OF INVENTION
SHEET B**

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-3

Lightning protection for a wind power generator including a rotating ring, a spark gap and a zinc oxide lightning arrestor

2. Claim : 4

A common aerial lightning protection system located above an array of wind power generators

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 10 5759

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82